

**UNCLASSIFIED**

---

**AD 295 461**

*Reproduced  
by the*

**ARMED SERVICES TECHNICAL INFORMATION AGENCY  
ARLINGTON HALL STATION  
ARLINGTON 12, VIRGINIA**



---

**UNCLASSIFIED**

**Best  
Available  
Copy**

NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U. S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.

|AD No. 295 461

DEVICE FOR MEASURING THE ABSOLUTE COEFFICIENTS  
OF MIRROR REFLECTION

By

O. A. Motovilov

295461

## UNEDITED ROUGH DRAFT TRANSLATION

DEVICE FOR MEASURING THE ABSOLUTE COEFFICIENTS  
OF MIRROR REFLECTION

BY: O. A. Motovilov

English Pages: 3

SOURCE: Russian Patent #141658 (689143/28),  
1960, pp. 1-2

S/19-61-0-19-67-91

THIS TRANSLATION IS A RENDITION OF THE ORIGINAL FOREIGN TEXT WITHOUT ANY ANALYTICAL OR EDITORIAL COMMENT. STATEMENTS OR THEORIES ADVOCATED OR IMPLIED ARE THOSE OF THE SOURCE AND DO NOT NECESSARILY REFLECT THE POSITION OR OPINION OF THE FOREIGN TECHNOLOGY DIVISION.

PREPARED BY:

TRANSLATION SERVICES BRANCH  
FOREIGN TECHNOLOGY DIVISION  
WP-AFB, OHIO.

FTD-TT- 62-1510/1+2

Date 12 Dec 19 62

O. A. Motovilov

DEVICE FOR MEASURING THE ABSOLUTE COEFFICIENTS OF MIRROR REFLECTION

The known devices for measuring the absolute coefficients of mirror reflection which contain optical attachments produce large errors not adjustable by computation, one of the causes of which is the turning of the light beam after reflection from the measuring mirror.

In the proposed device there is set up for the mirror to be measured the prism Dove-D, which turns the light beam. This enables one to increase the precision in determining the absolute coefficients of mirror reflection and eliminate the error introduced by the turning of the beam.

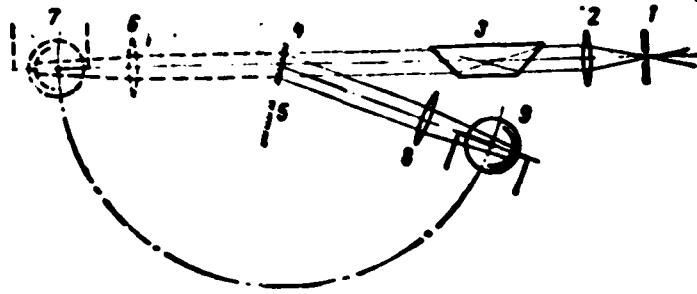
A schematic representation of the device described is given in the drawing.

The light beam focused by the objective 1 in passing the prism 2 reaches the prism 3 Dove-D, placed in the path of the light in front of the mirror 4 to be measured. With the aid of the prism 3 there is effected a turning both of the direct beam passing the measuring mirror 5, prism 6 and receiver 7, and of the reflected beam, which in passing the mirror to be measured 4 and the prism 8 goes on to the receiver 9. Meanwhile the position of the axis

of the prism 3 itself does not change and as a result of this the systematic error is eliminated, which was introduced by the lack of identicalness in the light spots in accordance with the distribution of the energy and lack of identicalness of the sensitivity of the receiver in its different points.

#### Subject of the Invention

A device for measuring the absolute coefficients of mirror reflection which is distinguished by the fact that, for the purpose of increasing the precision of the measurement there is set up before the mirror to be measured the prism Dove-D, which turns the light beam.



Editor N. S. Kutafina

Tech. Editor A. L. Resnik

Corrector L. I. Samscova

# DISTRIBUTION LIST

| DEPARTMENT OF DEFENSE | Nr. Copies | MAJOR AIR COMMANDS | Nr. Copies |
|-----------------------|------------|--------------------|------------|
|                       |            | AFSC               |            |
|                       |            | SCFTR              | 1          |
|                       |            | AEDC (AEY)         | 1          |
| HEADQUARTERS USAF     |            | ASTIA              | 25         |
|                       |            | TD-B1a             | 5          |
| AFCIN-3D2             | 1          | TD-B1b             | 3          |
| ARL (ARB)             | 1          | SSD (SSF)          | 2          |
|                       |            | ESD (ESY)          | 1          |
|                       |            | RADC (RAY)         | 1          |
| OTHER AGENCIES        |            | AFSWC (SWF)        | 1          |
|                       |            | AFMTC (MTW)        | 1          |
| CIA                   | 1          |                    |            |
| NSA                   | 6          |                    |            |
| AID                   | 2          |                    |            |
| OTS                   | 2          |                    |            |
| AEC                   | 2          |                    |            |
| PWS                   | 1          |                    |            |
| NASA                  | 1          |                    |            |
| RAND                  | 1          |                    |            |